

fere, ceteris Aplo latioribus quam longa; scuta ventralia alterum tantum fere latiora quam longa, sectionis anterioris haud bipartita. Branchiæ æquales, pallide luteæ, fasciis maculisve nullis, semiorbes referentes, longitudine segmentorum anteriorum 32, lamina basali minus alta, $\frac{1}{6}$ longitudinis branchiarum adæquante; fila branchialia utrinque 13 (14) æque longa, apice nudo $\frac{1}{6}$ longitudinis æquante, utrinque serie ocellorum punctiformium, a media branchiarum altitudine adscendente, ante apicem desinente instructæ; ocelli nigri, simplices, rhachi profunde inserti, numerosi, plus triceni; barbulae filorum haud flexuosæ, $\frac{1}{8}$ longitudinis eorum æquantes; membrana bases filorum conjungens, lamina basali altior; tentacula $\frac{1}{3}$ altitudinis branchiarum paulo superantia; collare humillimum, annulare, margine ventrali medio vix inciso, colore branchiarum. Tori uncinigeri sectionis anterioris lati, posterioris angustissimi; uncini aviculares, ordine simplici collocati; fasciculi setarum sectionis anterioris crassiores, posterioris tenuiores, utrinque setas capillares et paleas continentes, primus ceteris latior; setæ capillares sectionis posterioris tenerimæ, haud limbatae, leniter curvatae, anterioris fortiores; palea disco suborbiculari, mucrone subtilissimo instructæ, sectionis anterioris sub denæ, distichæ, posterioris quinæ.

Longitudo animalis haud completi 42·5 m., branchiarum 13, sectionis corporis anterioris 4 m., posterioris 25·5 m.

Sabellæ alticolli Gr. et *S. phæotæniæ* Schmd. simillima, sed in descriptione hujus ocelli haud commemorantur, et branchiæ fasciatae sunt, basi collarique fusco, in *S. alticolli* lamina basalis multo altior est et ocelli minus numerosi.

2. On the Habits of *Spermophila simplex*.

By W. NATION, C.M.Z.S.

[Received May 15, 1874.]

This plain-coloured *Spermophila* (lately described by M. Taczanowski *) is abundant near Lima, and, I believe, ranges a considerable distance north and south of Lima along the coast.

It frequents shrubs and bushes bordering cultivated land and watercourses, and gardens. It feeds upon the seed of the numerous *Malvaceæ* which abound along the coast of Peru. In the breeding-season it is found singly or in pairs, and in winter in small parties with individuals of *Zonotrichia pileata* and *Spermophila telasco*.

The nest, which is placed upon a branch of a low bush, is composed wholly of the fine twining stems and tendrils of *Passiflora minima*, with a few horsehairs for a lining.

The eggs are three in number, greenish, blotched with pale brown, interspersed with a few deep-brown blotches.

The habits, nest, and eggs of this bird differ considerably from those of *Spermophila*. In *Spermophila* we find a slenderer form, a

* P. Z. S. 1874, p. 132.

weaker bill, a slightly more rounded wing, and the claw of the hinder toe weaker and longer.

Possibly other birds of this form may be found in South America; and then it will be necessary to form them into a distinct genus.

3. List of the Butterflies of Costa Rica, with Descriptions of new Species. By ARTHUR G. BUTLER, F.L.S., F.Z.S., Senior Assistant in the Zoological Department, British Museum, and HERBERT DRUCE, F.L.S., F.Z.S., &c.

[Received May 16, 1874.]

The present list is founded chiefly upon the large collection brought over to England a year or two ago by Dr. Van Patten, and which was perhaps the most complete that ever has or will come from that locality. It was, however, made entirely at or in the neighbourhood of Cartago; and therefore we may still look for novelties from other parts of Costa Rica. Six new species are added in this paper.

A former communication on the collection made by Dr. Van Patten was read before the Society in July 1872; but as we wished to make it a complete list, and to add a few notes on some of the species, it was subsequently withdrawn.

The Moths collected by Dr. Van Patten being almost all day-fliers, would give but a poor idea of the Heterocerous fauna of Cartago, not to speak of Costa Rica; and as we have neither time nor inclination to collate the whole of the descriptions of species in this suborder, we have not included any of them in the present paper.

Family NYMPHALIDÆ (Westwood), Bates.

Subfamily DANAINÆ, Bates.

Genus 1. DANAIS, Latreille.

1. DANAIS CLEOTHERA.

Danais cleotera, Godart, Enc. Méth. ix. p. 185. n. 31 (1819); Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 12. fig. 2 (1847).

2. DANAIS ARCHIPPUS.

Papilio archippus, Fabricius, Sp. Ins. p. 55. n. 243 (1781).

Papilio plexippus, Cramer (*nec* Linn.), Pap. Exot. i. pl. 3. figs. A, B (1775).

Genus 2. LYCOREA, Doubleday.

3. LYCOREA ATERGATIS.

Lycorea atergatis, Doubleday & Hewitson, Gen. Diurn. Lepid. pl. 16. fig. 1 (1847).

Genus 3. ITUNA, Doubleday.

4. ITUNA LAMIRUS.

Heliconius lamirus, Latreille, in Humb. & Bonpl. Obs. Zool. ii. p. 126, pl. 41. figs. 7, 8 (1811?).